Computer Applications Name:

Microsoft Excel—Formulas

**Worksheet Formulas**

Worksheets can calculate values from numbers entered into cells. The equations used to calculate values in a cell are called formulas.

**How to start and enter a formula**

Excel recognizes a formula when an “=” sign is the first character keyed in a cell. You can enter a formula by pressing the Enter key or clicking on the green check mark next to the formula bar. As a formula is being keyed, it will show up in the cell and in the formula bar.

**The components of a formula**

A formula consists of two components:

1. Operand—a cell reference or a number, example B3 or 20
2. Operator—a mathematical function, example ^\*/+-

An example of a formula: =A3 + B3

The formula is telling Excel to add the values in cell A3 to the values in B3

1. Write a formula using operands and an operator:
2. Explain what your formula is telling Excel:

**Complex formulas**

Formulas containing more than one operator (such as multiplication and addition) are called complex formulas.

Example of a complex formula: =A3\*B3+C3

The formula is telling Excel to multiply the values in cell A3 and B3 and then add the value in cell C3.

1. Write a complex formula here:
2. Explain what your complex formula is telling Excel to do:

**Order of evaluation**

With complex formulas, Excel will use a sequence called order of evaluation to calculate the formula.

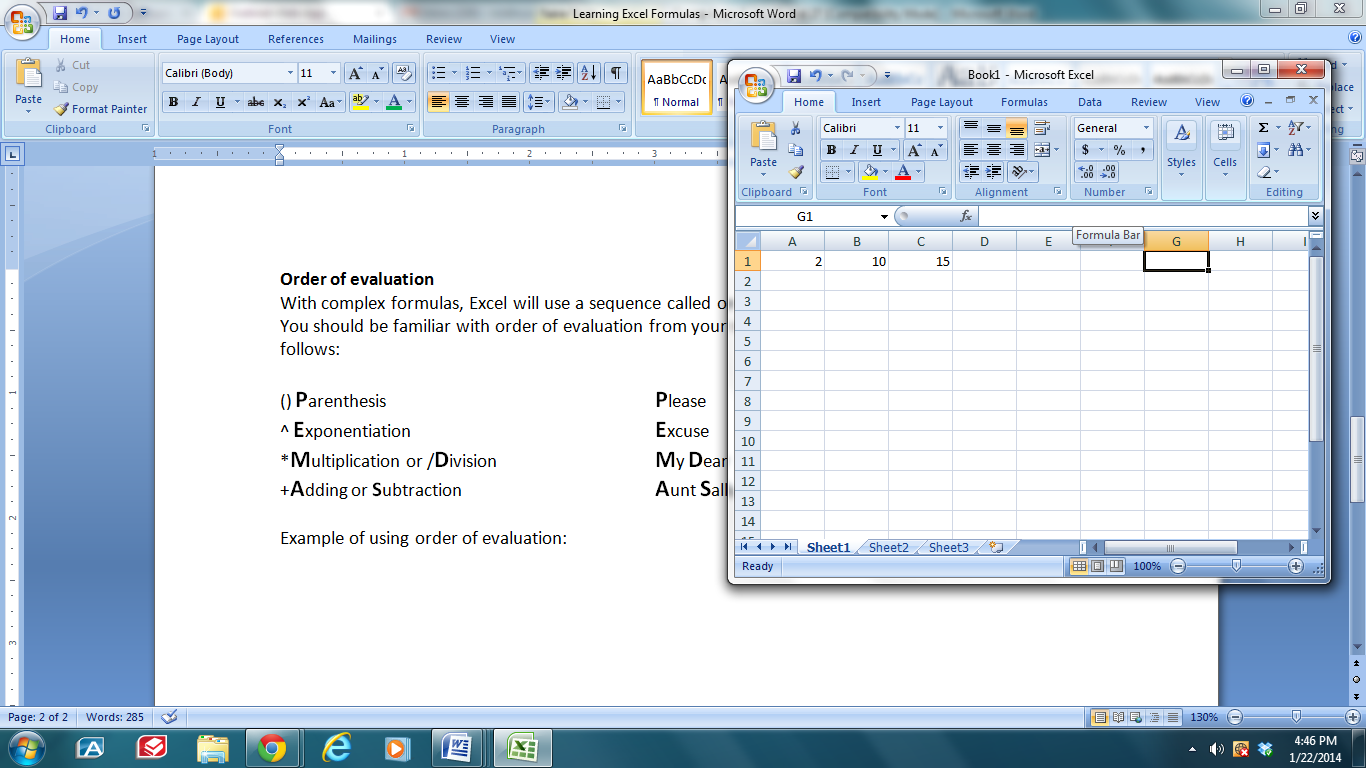
You should be familiar with order of evaluation from your math classes. The order of evaluation is as follows:

() **P**arenthesis **P**lease

^ **E**xponentiation **E**xcuse

\***M**ultiplication or /**D**ivision **M**y **D**ear

+**A**dding or **S**ubtraction **A**unt **S**ally

Example of using order of evaluation:

Using the spreadsheet above, solve the following equations using the order of evaluation.

1. = (A1 \* B1) + C1
2. = A1 \* B1 + C1
3. = A1 \* (B1 +C1)